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WHAT IS CLAIMED IS:

1.   A method of controlling power consumption of a group
of information handling systems that use a common power
source, the method comprising:
     storing an aggregate power limit for a group of
information handling systems;
     monitoring individual power consumption levels for
the information handling systems;
     automatically calculating an aggregate power
consumption for the group of information handling
systems, based on the individual power consumption
levels;
     automatically determining whether the aggregate
power consumption for the group of information handling
systems approaches the aggregate power limit;
     in response to determining that the aggregate power
consumption approaches the aggregate power limit,
automatically selecting at least one information handling
system among the group for power reduction; and
     in response to determining that the aggregate power
consumption approaches the aggregate power limit,
automatically communicating with the selected information
handling system to cause the selected information
handling system to reduce power consumption.

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2.   A method according to Claim 1, wherein the operation
of monitoring individual power consumption levels for the
information handling systems comprises:

       receiving power information from the information
5   handling systems via a power line.

3.   A method according to Claim 2, wherein the power
line that carries the power information comprises a
conductor that provides power from the circuit breaker to
10   the information handling systems.

4.   A method according to Claim 1, wherein the operation
of automatically communicating with the selected
information handling system to cause the selected
15   information handling system to reduce power consumption
comprises:

       communicating with the selected information handling
system via a power line.

20   5.   A method according to Claim 1, wherein the operation
of monitoring individual power consumption levels for the
information handling systems comprises:

       receiving power information reported from a power
level detection module within each of the information
25   handling systems.

6.   A method according to Claim 1, wherein the operation
of monitoring individual power consumption levels for the
information handling systems comprises:

reading power information from at least one device within at least one of the information handling systems.

7.   A method according to Claim 6, wherein the operation
5   of reading power information from at least one device within at least one of the information handling systems comprises:

obtaining extended display identification data from the device.
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8.   A method according to Claim 1, further comprising:

storing a power limit for at least one of the information handling systems in the at least one information handling system during a manufacturing
15   process, before shipping the at least one information handling system to a customer.

9.   A method according to Claim 1, further comprising:

storing a power priority setting for at least one of
20   the information handling systems in the at least one information handling system, during a manufacturing process, based on information provided by a customer, before shipping the at least one information handling system to the customer.

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10.   A method according to Claim 1, further comprising:

storing individual power limits for the information handling systems in the information handling systems during a manufacturing process, based on information

5   regarding a deployment environment for the information handling systems, before shipping the information handling systems to a customer; and

storing individual power priority settings for the information handling systems in the information handling

10   system, during a manufacturing process, based on information regarding the deployment environment for the information handling systems, before shipping the information handling systems to the customer.

15   11.   A method according to Claim 1, wherein the operation of monitoring individual power consumption levels for multiple information handling systems comprises:

receiving a slave power packet from at least one of the information handling systems, the slave power packet

20   including a request for permission to modify power consumption.

12.   A method according to Claim 11, wherein the operation of automatically and dynamically determining

25   whether the aggregate power consumption approaches the aggregate power limit comprises:

determining whether the request for permission to modify power consumption, if granted, would exceed the aggregate power limit.

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13.   A method according to Claim 1, wherein:

the operation of monitoring individual power consumption levels for the information handling systems comprises monitoring computers that draw power from a shared circuit breaker; and

the operation of storing an aggregate power limit comprises storing trip point data that corresponds to a current trip point for the shared circuit breaker.

14. A method for dynamically throttling power consumption of information handling systems, the method comprising:

receiving power information from power level
5   detection modules of multiple computers;

in response to receiving the power information, automatically computing an adjusted power threshold setting for at least one of the computers; and

in response to computing the adjusted power
10 threshold setting, automatically transmitting the adjusted power threshold setting to a power control module for the at least one computer.

15. A method according to Claim 14, wherein the
15 operation of receiving power information from power level detection modules of multiple computers comprises:

receiving a slave power packet from at least one of the computers, the slave power packet including a request for permission to modify power consumption of the at
20 least one computer.

16.   An information handling system with support for dynamic power throttling, the information handling system comprising:

an interface operable to communicate with multiple

5   computers; and

a power level manager in communication with the interface, wherein the power level manager performs operations comprising:

receiving power information for each of the

10   computers;

in response to receiving the power information, automatically computing an adjusted power threshold setting for at least one of the computers; and

in response to computing the adjusted power

15   threshold setting, automatically transmitting the adjusted power threshold setting to the least one computer.

17.   An information handling system according to Claim

20   16, wherein:

the interface comprises a power line data interface; and

the power level manager transmits the adjusted power threshold setting over a power line via the power line

25   data interface.

18.   An information handling system with support for
dynamic power throttling, the information handling system
comprising:
        a power level detection module operable to
5   communicate with a power level manager; and
        a power control module operable to communicate with
the power level manager, wherein:
        the power level detection module monitors power
consumption for the information handling system;
10   the information handling system automatically
transmits power level data to the power level manager,
based on the monitored power consumption;
        the power control module receives power control data
from the power level manager; and
15   the power control module automatically adjusts power
consumption of the information handling system, in
accordance with the power control data received from the
power level manager.

20   19.   An information handling system according to Claim
18, wherein the power control data comprises a power
threshold setting.

20.   An information handling system according to Claim
25   18, further comprising:
        a power supply that converts alternating current to
direct current; and
        wherein the power level detection module resides
within the power supply.

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21.   An information handling system according to Claim
18, further comprising:
        a power line data interface in communication with a
power line; and
5   wherein the power control module receives the power
control data from the power level manager via the power
line data interface.

22.   An information handling system according to Claim
10   18, further comprising:
        a power supply that converts alternating current
from a source of electricity to direct current; and
        wherein the power line data interface resides within
the power supply.
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23.   An information handling system according to Claim
18, further comprising:
        multiple slave computers that draw power from a
shared circuit breaker having a predetermined trip point,
20   each slave computer containing a power level detection
module and a power control module according to Claim 18;
and
        a master computer containing a power level manager
according to Claim 18, wherein the master computer
25   automatically and dynamically adjusts power thresholds
for each of the slave computers, to prevent the slave
computers from exceeding the trip point of the shared
circuit breaker.

24. A method of supporting dynamic power throttling in an information handling system, the method comprising:

monitoring power consumption for an information handling system;

5   automatically transmitting power level data from the information handling system to a power level manager, based on the monitored power consumption;

receiving power control data from the power level manager at the information handling system; and

10   automatically adjusting power consumption of the information handling system, in accordance with the power control data received from the power level manager.

25. A method according to Claim 24, wherein the
15 operation of automatically transmitting power level data from the information handling system to a power level manager comprises:

utilizing a network module to transmit the power level data.

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26.   A method for dynamically throttling current draw of computers on a common circuit, the method comprising:

receiving current information from current level detection modules of multiple computers on a common

5   circuit;

in response to receiving the current information, automatically computing an adjusted current threshold setting for at least one of the computers; and

in response to computing the adjusted current

10   threshold setting, automatically transmitting the adjusted current threshold setting to a current control module for the at least one computer.

27.   A method according to Claim 26, further comprising:

15   automatically determining whether an aggregate current draw of the multiple computers approaches a breaker threshold for a breaker on the common circuit; and

if the aggregate current draw approaches the breaker

20   threshold, automatically transmitting the adjusted current threshold setting to at least one of the computers, to preventing the aggregate current draw of the multiple computers from exceeding the breaker threshold.

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28.   A method for throttling current in an information
handling system, the method comprising:

        receiving, at a computer, user input that specifies
a current limit for the computer;

5   receiving current information from a current level
detection module in the computer; and

        automatically throttling current draw of the
computer to prevent the current draw from exceeding the
current limit, based on the current limit and the current

10   information.